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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,954	05/03/2001	Sergey Lyusin	0008026-0006	6924

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EXAMINER

ISSING, GREGORY C

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 11/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/848,954

Applicant(s)

LYUSIN, SERGEY

Examiner

Gregory C. Issing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *in the papers filed 9/8/03 + 11/6/03 the data regarding applicant is in error "Townsend et al" - 2 ybs out*

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1. The drawings are objected to because in Figure 7 box '740' remains unidentified. The drawing changes to Figures 7 and 8 are acknowledged, although the drawing change to Figure 8 was not provided in the RCE. The drawing changes originally filed 9/8/03 are approved; additionally, Figure 7 should label box 704 as "broadcast station".

2. Claims 21-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification is insufficiently disclosed with respect to a computer program product and its associated computer readable code to enable a skilled artisan to make and/or use the subject matter; there is no code or algorithm set forth in the specification perform the claimed steps. The amendment also fails to make clear how the "computer usable medium" which appears to be housed in/at the object to be positioned can be configured to cause a broadcast station to transmit an assistance signal. The response fails to clarify how the specification is enabling for subject matter rejected above.

3. Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose using only the assistance signal when the satellite signals have inadequate SNR. Moreover, it would not be clear how "using only the assistance signal" would provide a positioning system since the scope of "using" is not clear and since the assistance signal is merely aiding information including as exemplified in the specification

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Doppler frequencies, Ephemeris data, Almanac data, navigation message bits, and correction information. The specification does not sufficiently describe how positioning is determining using only the assistance data. Lastly, the scope of “inadequate” is not defined in the specification. The applicants argue that the specification complies with the written description requirement since the transition word “comprising” leaves the claims open-ended and thus uses an assistance signal along with other signals. This is not convincing. Firstly, the “comprising” is descriptive of the system components, i.e. the satellites, broadcast station and receiver. Secondly, the applicants specifically amended the claim language to incorporate the language “use only said assistance signal when said satellite signals have inadequate SNR” in an attempt to overcome the prior art and is descriptive of not using anything except the assistance signal, see paper filed 9/16/03, page 4, for example. Thus, the rejection is maintained and the applicants’ argument is not convincing.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-6, 9, 11-16, 19, 21-26, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor et al.

6. Taylor et al disclose the claimed system and method including a plurality of satellites 16 configured to transmit signals, a broadcast station antenna 29 configured to transmit an assistance signal and a plurality of receiver terminals 14 configured to receive the satellite signals and the assistance signals. The assistance signals may include, as shown in Figure 2, Doppler data, satellites-in-view data and satellites’ position data. In view of the similarity in the

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claimed system and the prior art, the computer program product, as best understood, which could be used to perform the steps of the method is inherent.

7. Applicant argues that Taylor et al fail to suggest using only the assistance data when the satellite signals have an inadequate SNR. As set forth above, such feature is not sufficiently disclosed in the specification, is considered new matter and is not considered as being a part of the claim (as it is required to be cancelled). Therefore, the claims merely set forth a positioning system with transmitting satellites, a broadcast station transmitting assistance data and a receiver. This is shown by Taylor et al, as well as any DGPS receiver system, wherein there are GPS satellites transmitting positioning signals, a base station transmitting assistance data and the mobile receiver receiving and using the satellite signals and the base station signals.

Additionally, note that the remarks in the response filed 9/8/03 attempt to get around the written description of the invention rejection by stating "the positioning system uses an assistance signal along with other signals" since "comprising" is open-ended. Thus, the applicants' remarks are contradictory.

8. Claims 1-7, 9-17, 19-27 and 29-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Krasner.

9. Krasner discloses the claimed system and method for use in a position determining system including a mobile terminal, as shown by Figure 6A, that receives signals from GPS satellites via antenna 613 and signals from a base station via communication antenna 601 in order determine position with reduced power consumption. The signals from the base station, which is exemplified in Figures 5A and 5B, include Doppler data, identities of satellites in view and/or satellite almanac data. Such data may be derived at the base station or may be obtained

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from a server site on the Internet. The receiver is suggested to be a 2-way pager or cellular telephone. In view of the similarity in the claimed system and the prior art, the computer program product, as best understood, which could be used to perform the steps of the method is inherent in view of the digital processing of Krasner.

10. Applicant argues that Krasner fails to suggest using only the assistance data when the satellite signals have an inadequate SNR. As set forth above, such feature is not sufficiently disclosed in the specification, is considered new matter and is not considered as being a part of the claim (as it is required to be cancelled). Therefore, the claims merely set forth a positioning system with transmitting satellites, a broadcast station transmitting assistance data and a receiver. This is shown by Krasner, as well as any DGPS receiver system, wherein there are GPS satellites transmitting positioning signals, a base station transmitting assistance data and the mobile receiver receiving and using the satellite signals and the base station signals. Additionally, note that the remarks in the response filed 9/8/03 attempt to get around the written description of the invention rejection by stating "the positioning system uses an assistance signal along with other signals" since "comprising" is open-ended. Thus, the applicants' remarks are contradictory.

11. Claims 7, 8, 17, 18, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Krasner or Taylor et al in view of Richton et al.

12. Each of Krasner and Taylor et al teach the subject matter substantially as claimed including the provision of satellite signals and assistance signals to a mobile receiver for the purpose of determining position. While Krasner suggests the incorporation within a cellular telephone, Taylor et al merely suggest incorporation within a user terminal without being specific. However, each prior art terminal does incorporate a satellite receiver, a communication

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receiver and a computing processor. Richton et al additionally teach an auxiliary system for providing assistance data to wireless terminals operable for determining position from navigation satellites. Furthermore, Richton et al suggest uses inclusive of cellular telephones and portable data terminals. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify either one of Krasner or Taylor et al by incorporating the position determining system utilizing assistance data in any conventional portable device including cellular telephones or personal data terminals in view of the teachings of Richton et al.

13. Applicants do not separately argue this rejection; these claims therefore stand or fall with the claims from which they depend.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Watters et al are cited as showing an integrated GPS/cellular receiver wherein when GPS signals are inadequately received the cellular base station signals are utilized to determine position. Switch 995 shows using only one of the signals at a time.

15. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

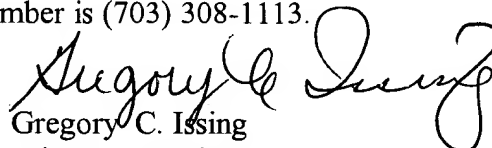
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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is (703)-306-4156. The examiner can normally be reached on Mon-Thurs 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (703)-306-4171. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.


Gregory C. Issing
Primary Examiner
Art Unit 3662

gci